

A NEW SPECIES OF *ACROBASIS* FROM MEXICO
(LEPIDOPTERA: PYRALIDAE: PHYCITINAE)¹

H. H. NEUNZIG

Department of Entomology, North Carolina State University, Raleigh, North Carolina 27650.

Abstract.—*Acrobasis mexicana*, n. sp., is described from the mountains of eastern Mexico. The species is closely related to *Acrobasis minimella* Ragonot and *Acrobasis blanchardorum* Neunzig of the United States.

Ragonot described *Acrobasis minimella* in 1889. The food plant of the larva of this species was subsequently determined to be oak (*Quercus* spp.) and the distribution of *minimella* established to be the southeastern United States (Heinrich, 1956). In 1973, I described the closely related species *Acrobasis blanchardorum* whose larval stage also feeds on oak (Neunzig, 1977), but in the southwestern United States. The present paper describes another species of *Acrobasis* collected in Mexico that has close affinities to both *A. minimella* and *A. blanchardorum*. The new species is also thought to feed on oak as a larva.

Acrobasis mexicana Neunzig, NEW SPECIES

Figs. 1-3

Description.—Wing expanse 15-17 mm.

Head mostly fuscous with some reddish-brown scales anteriorly and tan to reddish tan dorsoposteriorly. Labial palpus mostly fuscous and reddish brown with white on inner surface and at basal $\frac{1}{4}$. Antenna with basal segment fuscous and reddish brown; sensilla trichodea on shaft about as long as width of shaft at sinus; 3 to 4 closely grouped, short, slightly thickened spinelike sensilla at distal aspect of sinus.

Collar reddish tan. Thorax predominately fuscous dorsally. Black sex-scaling absent on thorax.

Forewing with costa straight to slightly convex, mostly fuscous, with a relatively distinct white patch of scales in basal area near scale ridge and costa, and another white patch in anterior median area; additional less conspicuous white-tipped scales forming posterior of antemedial line, postmedial line, and in terminal area; basal area with many reddish-brown scales in addition to white and fuscous scales; triangular costal patch following antemedial line black, sometimes with a few scattered reddish-brown scales; raised-scale ridge black with few reddish-brown

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Fig. 1. *Acrobasis mexicana*, male holotype.

scales; area between scale ridge and antemedial line pale brown; posterior median area with many reddish-brown scales in addition to white and fuscous scales; discal spots separate, distinct; undersurface with short, brownish-white costal streak basally and without black sex-scaling. Hindwing pale smoky fuscous; undersurface without black sex-scaling.

Genitalia with apical process of gnathos a simple, elongate hook; terminal margin of transtilla distinctly concave; anellus a relatively short, slightly wrinkled U-shaped plate; base of valva with more or less half-round prominent protuberance; aedeagus simple.

Holotype.—Mexico: Nuevo Leon, 18 mi. W. of Linares, ♂, 12-IX-76, black light, J. A. Powell and J. A. Chemsak. ♂ genitalia slide HHN 584; in The California Academy of Sciences, San Francisco (on indefinite loan from the University of California, Berkeley).

Paratypes.—Mexico: Nuevo Leon, 2 ♂, 30 km W. of Linares, 29-VII-81, H. H., C. M., and K. M. Neunzig. Mexico: Tamalipas [sic], 1 ♂, 12 mi. SW Ciudad Victoria, 4000', at lights, 17/18-IX-76, J. A. Chemsak and J. Powell. One of the paratypes collected 29-VII-81 is in the National Museum of Natural History, Washington, D.C., and the other is in the North Carolina State University Insect Collection. The paratype collected 17/18-IX-76, is in the University of California Insect Collection, Berkeley.

Larval Host.—The food plant of the larva of *A. mexicana* is not known. However, in all likelihood it is oak (*Quercus*) because of the great similarity among the adults of *A. mexicana*, *A. minimella*, and *A. blanchardorum*. Also, I found



Figs. 2, 3. *Acrobasis mexicana*. 2, Male genitalia, aedeagus removed. 3, Aedeagus.

serpentine frass and silk tubes similar to those formed by larvae of *A. minimella* and *A. blanchardorum* on the undersurface of oak leaves at the type-locality and at several other locations in Mexico.

Distribution.—Presently known with certainty only from the Sierra Madre Oriental of Nuevo Leon and Tamaulipas, Mexico. However, it is reasonable to assume that the species occurs throughout most of the moderately high elevations of Mexico where oak is generally a common component of the vegetation; frass and silk tubes probably constructed by *A. mexicana* were found on *Quercus* spp. as far south as El Palomar, Oaxaca, Mexico, in the Sierra de Las Mixtecas.

Discussion.—*Acrobasis mexicana* can be distinguished from all other North American species of *Acrobasis*, except *A. minimella* and *A. blanchardorum*, in that males possess a distinct raised transverse ridge of scales on the forewings in combination with a simple, single-hooked gnathos. All other North American *Acrobasis* with a distinct ridge of scales on the forewings have a trifurcate gnathos.

The most obvious difference separating *A. mexicana* from *A. minimella* and *A. blanchardorum* is the complete absence in males of *A. mexicana* of black sex-scaling on the undersurface of both forewings and hindwings. Both *A. minimella* and *A. blanchardorum* males have a long streak of distinct black scales on the undersurface of the forewings just below the costa and another long black streak in a similar location on the hindwings. In addition, *A. mexicana*, while having a similar color pattern to *A. minimella* and *A. blanchardorum* on the uppersurface of the forewings, is noticeably less brightly colored. Both *A. minimella* and *A. blanchardorum* have obvious red or purple scales on the thorax and forewings; these scales are more brown or reddish brown in *A. mexicana*. In addition, the

ochreous patch following the scale ridge of *A. minimella* and *A. blanchardorum* is a dull pale brown in *A. mexicana*. The male genitalia of *A. mexicana*, *A. minimella*, and *A. blanchardorum* are similar. The terminal margin of the transtilla of *A. mexicana* appears to be more concave than in the other two species.

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